

***Beautiful minds—the parallel lives of great apes and dolphins.* Maddalena Bearzi and Craig B. Stanford.**

Cambridge, Massachusetts, and London, England: Harvard University Press, 2008. VIII + 351 pp., ISBN 978-0-674-02781-7 (hardback), \$ 24.95.

It took 13 years for cetologists to catch up to their primate counterparts. By the time *Cetacean Societies* was published in 2000, it had become evident that cetacean and primate societies are strikingly similar in many facets and aspects, despite their most recent common ancestor having lived over 95 million years ago. Consequently, since the turn of the millennium, there have been several joint scientific meetings, attended by researchers of both fields, aimed at elucidating the mechanisms that led to the convergent evolution of many traits in these two taxa. Several papers highlighting the comparative aspects have been published, and a number of books coedited by primatologists and cetologists are now close to being finished.

With the publication of *Beautiful Minds*, Bearzi and Stanford for the first time give an understanding of the intricacies of the convergent evolution of cetacean and primate societies both to the lay public and to undergraduate students. The timing for this publication is impeccable, as the authors were able to incorporate the significant advancements both fields have made in the past decade into this entertaining, yet informative, compilation. Initially, I found the title of the book somewhat misleading, as it suggests that only the cognitive abilities of the two taxa had been addressed. However, the authors provide a comprehensive account of past and recent research both in well-established and emerging areas, such as development of social systems, cognition, and animal culture, which they link to the high encephalization that both taxa undoubtedly exhibit. Unfortunately, the authors limit themselves only to great apes and a rather random selection of several species of delphinids. To the naive reader, it might seem that some of the traits dealt with in the book only appeared in some representatives of these two taxa, which of course has been shown otherwise by numerous studies. For instance, well-documented examples for animal cultures (omitted from the book) come from studies of capuchin monkeys and humpback whales. Ironically, the strongest evidence for culture in cetaceans to date comes from just these humpback whales.

The book consists of eight chapters that interweave personal experiences by the authors with both

anecdotal and scientific evidence. Although, generally quite refreshing, on a few occasions the described interactions between author and subject are sometimes too anthropomorphized, or even kitsch, for my admittedly rather sober northern European taste, with the border between fact and fiction becoming quite blurred. One might argue that this is an unavoidable necessity with the book being aimed at a wide audience. I wonder, however, whether this approach might merely fuel preconceptions, especially those of colleagues accustomed to larger sample sizes than typically obtained in our fields. Moreover, the authors use much more anecdotal data, relative to quantitative data, for cetaceans than for primates. This might as well reflect the current state of research, but given the logistical challenges that research in the marine realm faces, I hope that this will not lead to the impression that work on marine mammals is not as rigorous as it is on terrestrial species. On the other hand, and the book conveys this very nicely, the current research in both fields is far beyond what even the most optimistic colleagues could have imagined possible at the time *Primate Societies* was published in 1987.

The most informative chapters bring together more than five decades of research from several domains in both fields, in particular cognition and its implications for the evolution of primate and dolphin societies, social learning, and the emergence of animal culture, as well as implications for the evolution of human intelligence. Apart from some minor issues, the book is generally well researched and reflects the latest findings for cetaceans and primates both from field and laboratory research. I quite enjoyed reading *Beautiful Minds*. Bearzi and Stanford generally succeed in tying these fields together into an interesting bundle, and in placing these fascinating taxa on a par with each other and further closing the gap between humans and animals. One can only hope that creationists do not abuse this book as further evidence for their views, as “convergent evolution” seems to be the most popular keyword in such circles.

Michael Krützen
Anthropological Institute and Museum
University of Zurich, Winterthurerstr. 190
8057 Zurich, Switzerland
E-mail: michael.krutzen@aim.uzh.ch

Advance Access publication September 16, 2008

doi:10.1093/icb/icn084